introduction of 100 U/ml insulin is difficulty in measuring small doses, but this does not seem to be a problem with modern disposable syringes, even though it might be with the current British Standard glass syringe.

Twenty (51%) patients had previously used the 20 mark/ml scale and preferred the new scale with direct-reading 80 marks or units/ml; 28 (72%) thought that errors of doses were less likely with the syringes with the new scale; 35 (90%) preferred the disposable syringes to the glass syringes, while two found them equally convenient and two found them inferior. Twenty-six (67%) said they would be willing to pay 5p per syringe for the convenience of using it, whereas only 23% said they would be willing to pay 10p per syringe.

This study supports the advantage of changing to disposable syringes. A surprising number of patients would appear to be willing to purchase a well-designed disposable syringe-needle combination in preference to current glass syringes. With regard to multiple use of disposable syringes, crystalline insulins occasionally block the needle and prevent reuse. Several of our patients have commented that the needles become considerably less sharp after three or four uses. Even with that amount of reuse, it would probably be advantageous for the DHSS to supply disposable syringes rather than the current glass syringes, particularly if one takes into account the cost of insulin discarded on washing the glass syringes.

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Lupus-like autoimmune syndrome after levodopa and benserazide

SIR,—We refer to the paper of Dr Robert M Bernstein (2 June, p 1461) reporting a case of levodopa-induced autoimmune reversible haemolytic anemia and to the paper of Dr Julien Bensaid and others (16 June, p 1603) reporting a case of pindolol-induced systemic lupus erythematosus. We have seen a patient who developed a lupus-like autoimmune syndrome during treatment with a product containing levodopa and benserazide, a known carboxylase inhibitor.

A 62-year-old man with sclerotic heart disease was prescribed levodopa 600 mg daily plus benserazide 150 mg daily for Parkinson's disease in July 1976. About two months after starting this treatment—which completely cleared the neurological symptoms—he presented with weakness, anorexia, diffuse joint pains, fever, "butterfly" erythema, erythema on the back, lumbosacral region, and anterior surface of the thighs, hepatomegaly, and malleolar oedema.

Blood tests showed: haemoglobin 13.5 g/dl; red blood count $4.1 \times 10^{12}/l$; white cell count $5.9 \times 10^9/l$, neutrophils 53%, eosinophils 9%, lymphocytes 33%, monocytes 4%; platelets $130 \times 10^9/l$; total bilirubin 17.8 $\mu\text{mol/l}$ (1.04 mg/100 ml), serum aspartate transaminase 240 U/l; alanine transaminase 240 U/l; total proteins 63 g/l, albumin 39.4%, globulins: α_1 3.3%, α_2 10.3%, β 17%, γ 30%; bromsulphthalein retention 27% after 45 minutes. Urinary investigations showed protein 5 g/l, microhaematuria, hyaline granular casts, and creatinine clearance 65 ml/min. Hepatitis B

surface antigen was absent and C3 concentration was 600 mg/l. The RA test titre was 1/360 and the Rose Waaler titre 1/640, and LE cells were absent. Tests for antibodies showed: antinuclear antibodies 1/260; perinuclear antibodies + — —; anti-smooth muscle antibodies + + +, anti-native DNA antibodies absent. Lymphocyte cultures with levodopa and benserazide were negative.

Withdrawal of treatment caused the subjective symptoms and fever to disappear. Sixty days later the erythema was no longer visible and the serological indices had returned to normal except for: globulin 26%; Rose Waaler titre 1/80; bromsulphthalein retention after 45 minutes 12%; and anti-smooth muscle antibodies + — —.

Other authors¹⁻⁴ who have reported levodopa-induced autoimmune syndromes noted the symptoms only many months after the start of treatment (not less than eight months) and with doses of 2 to 4 g daily; in addition, none observed rapid spontaneous disappearance of the autoantibodies. We have found no other report of a levodopa-induced SLE-like syndrome; Chrusciel⁵ cited a lupus-like syndrome in rats treated with 50 mg/kg/day for at least nine weeks with benserazide, but no case has been reported in man. While the rapid onset of lupus-like syndrome at low doses of levodopa suggests the triggering of latent SLE, the nearly complete remission after stopping the drugs points to an autoimmune origin. It may be that, as other authors have suggested, levodopa has an adverse effect on nucleoproteins or on nuclear fragments, with the release of autoantigens, probably as is the case with the isomer α -methyldopa. This hypothesis might be confirmed by the negative results of lymphocyte stimulation tests, which exclude a direct action on the T lymphocytes. It seems most unlikely that benserazide in such small doses could have caused such a rapid onset of an immune syndrome.

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¹ Lindström, F D, Lieden, G, and Endström, M S, *Annals of Internal Medicine*, 1977, **86**, 298.

² Cotsias, G C, and Papavasiliou, P S, *Journal of the American Medical Association*, 1969, **207**, 1353.

³ Territo, M C, Peters, R W, and Tanaka, K R, *Journal of the American Medical Association*, 1973, **226**, 1347.

⁴ Wanamaker, W M, et al, *Journal of the American Medical Association*, 1976, **235**, 2217.

⁵ Chrusciel, M, *European Journal of Pharmacology*, 1969, **8**, 192.

Smoking and anaesthetics

SIR,—In the last sentence of their paper (11 August, p 355) on smoking in pregnant women, Dr Judith M Davies and others raised the question of anaesthesia in smokers once again. While agreeing that abstinence from smoking should be encouraged before anaesthesia, there are problems which must be faced. It is usually impossible to admit patients earlier than 48 hours before anaesthesia, and in most cases the doctor cannot devote enough time to persuading patients to stop smoking earlier than this. If a heavy smoker, with a very high consumption of cigarettes, who also has chronic bronchitis stops smoking the chest tightens up for the next 48 hours, and it becomes impossible to expel tenacious sputum.

This gradually relieves itself, but during this period the patient is miserable and is coughing constantly and without relief.

I therefore suggest that either smoking should cease four weeks before operation or it should be allowed to continue with due regard to premedication, night sedation, etc, up to the morning of the operation. Incidentally, if one discusses the difficulty of stopping smoking or drinking with a patient who is dependent, or has been dependent, on both, one is told that stopping smoking is more difficult, mainly because it is socially acceptable at any hour of the day or night.

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Fetal malnutrition—the price of upright posture?

SIR,—In his excellent and stimulating article Dr André Briend (4 August, p 317) reminds us that in most population studies the mean birth weight is slightly lower than the optimal birth weight—that is, the birth weight associated with the lowest perinatal mortality. He then argues that this disproves the otherwise tenable hypothesis that slight fetal growth faltering occurring just before birth is an adaptive process to facilitate delivery.

Man's successful adaptation has always depended on his cerebral efficiency, and it may well be that in such terms a slight increase in perinatal mortality has proved a small price to pay if the smaller fetal heads of those who did survive contained less birth-damaged and more efficient brains.

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Yersinia arthritis

SIR,—We read with interest the papers by Dr D Y Bulgen and others and Drs J T Scott and N S Mair (12 May, pp 1250 and 1251) describing the arthritic sequelae which may follow infection with *Yersinia enterocolitica*. Pigs are the only source from which serotypes of *Y. enterocolitica* causing human disease have been regularly isolated and are therefore assumed to be the most likely reservoir for infection in man. In view of the apparent increase in infections caused by *Y. enterocolitica* and the lack of data regarding the incidence of this organism in British farm animals we have investigated the caecal contents of healthy pigs for the presence of *Y. enterocolitica*. Animals from farms in Hampshire, Surrey, and Sussex were slaughtered at a local abattoir and caecal contents from 169 pigs were collected immediately after evisceration.

Pooled samples of caecal material were examined by direct plating on to deoxycholate citrate agar containing 1% sucrose (DCLS) and a "cold-temperature enrichment" technique undertaken by inoculating about 1 g of pooled contents into 5 ml of 0.067M phosphate-buffered saline (PBS) at pH 7.6. The inoculated PBS was stored at 6°C for three weeks before plating on to DCLS agar. Plates were incubated at 30°C for 48 hours, after which at least three colonies resembling control strains of *Y. enterocolitica* were submitted to further investigations. Oxidase and urease activity, lactose fermentation, and phenylalanine deamination were determined on each isolate followed by further confirmatory biochemical tests on organisms giving reactions resembling *Y. enterocolitica* in the initial tests.

Caecal contents from 39 pigs were pooled in

groups of three and none of these pools yielded organisms identified as *Y. enterocolitica*. The remaining 130 specimens were pooled in groups of 10, and from one of these pools *Y. enterocolitica* biotype 1, non-serotypable, was isolated. A second pool yielded an organism resembling *Y. enterocolitica* biotype 1 but which produced a negative result in tests for ornithine decarboxylase and lipase activity and was V-P negative.

Our results suggest that there is a low incidence of carriage of *Y. enterocolitica* in pigs from the south of England. However, carriage may vary geographically in Britain and may also show a seasonal variation: the specimens in this study were all collected between November and February.

To determine the sensitivity of the methods of isolation used we undertook a quantitative investigation using a reference strain of *Y. enterocolitica* biotype 4, serotype 3. This organism was regularly recovered after direct plating of pig caecal contents containing 8×10^4 organisms per g. However, after cold-temperature enrichment for three weeks the reference strain could not be routinely recovered from caecal contents initially inoculated with 8×10^6 organisms per g. The total count of bacteria increased during the period of incubation at 6°C, but *Pseudomonas* spp. predominated and this overgrowth probably accounted for the reduced sensitivity of the recovery of *Y. enterocolitica*.

These findings indicate that a more detailed study of the incidence of *Y. enterocolitica* in farm animals is required to determine whether or not these animals may represent the main reservoir for human infection. Some modification of the cold-temperature enrichment technique may also be required in studies on caecal material of porcine origin.

We are indebted to Dr N Mair of Leicester Public Health Laboratory for the confirming and serotyping of the *Y. enterocolitica* isolate and to Miss M Kendall of the Food Hygiene Laboratory, Colindale, for providing the reference strains of *Y. enterocolitica*.

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The case against neonatal circumcision

SIR,—Many complications of circumcision, which include infection, haemorrhage, injuries to the glans and shaft, meatal ulcers, and meatal stenosis, have been well known for years. A recent leading article (5 May, p 1163) discussed current medical opinion on the subject. We would like to add the following case history to the literature.

A healthy 1-week-old infant had a circumcision performed by a well-trained and experienced physician without any anaesthetic. The infant tolerated the procedure well except for excessive crying, which began at the time of the operation. The mother, attempting to soothe her distressed infant, resumed breast feeding after the operation. An episode of vomiting followed the feeding. An apnoeic spell followed the emesis. The infant was taken to a local emergency room and subsequently transferred to the Children's Hospital of Los Angeles. He received a complete septic work-up, intravenous antibiotics and hospitalisation for five days of observation until the cultures were negative and sepsis was ruled out. The infant was discharged from the hospital six days after circumcision doing very well.

Infants do feel the pain of the surgical removal of the foreskin performed without any anaesthetic, and they respond to the pain by crying. That crying may be excessive. Air may

be swallowed. Mothers do soothe their infants by feeding them. Vomiting may follow the feeding. Apnoea may follow vomiting.

Circumcision can be the onset of an unfortunate and unnecessary medical history. It is a procedure that should not be considered minor. If circumcision is done, it should be done with anaesthesia. But is it really worth the risk of anaesthesia? Pros and cons should be thoroughly and completely discussed with the infant's parents before the procedure is done.

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Destroying the whole-time option

SIR,—There appears to be a body of opinion, grossly over-represented in the CCHMS and its negotiating subcommittee, which finds it unacceptable that a consultant should earn the whole of his income from the NHS. Having failed to destroy the whole-time option by way of "the new contract" it now seems hell bent on achieving the same result by major modifications to our existing contracts. The speed with which these have been produced and presented to the new Secretary of State raises fears that they may become established fact before we all realise what is happening.

The main effect of the proposal that maximum part-time consultants should in future be paid 10/11ths of the whole-time consultant salary would be to give a further 9% pay rise to these particular consultants. If, as seems unlikely, "new money" is to be made available for this purpose, then it should be shared out in an equitable manner. If, however, there is no extra cash then the 9% for the part-timers would be achieved only by an equivalent reduction in the pay of the other half of the consultant body—the whole-timers. It may be that the other major proposal, that whole-timers should be allowed private practice to a limit of 10% of their NHS salaries, is meant to compensate for this, but if so it is quite unacceptable.

However difficult it may be for them, the CCHMS and others will have to learn that a large proportion of whole-time consultants have neither the time nor the inclination to become involved in private medicine, even if the opportunity existed, which in many cases it does not.

Instead of devising ever more complex schemes to manipulate our contracts for the benefit of the more vocal section of the profession, our so-called leaders should turn their attention to the real causes of declining morale. These owe very little to thwarted ambitions in the direction of private medical care but a great deal to the chronic underfunding of the NHS and even more to the appalling consequences which we can foresee if the proposed cuts in public expenditure are forced through.

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The "Radcliffe" hospitals, Oxford

SIR,—I have received several letters about the article "The Radcliffe hospitals" (7 July, p 33). Most have made reference to the need for a residents' mess in all hospitals and,

indeed, to a similar need for a room where consultants may meet and discuss hospital matters. One correspondent from North America suggests, "The average hospital administration has little or no idea of the value of a central meeting point, due in part to the fact that they don't seem to recognise the concept of an 'informal' variety of social organisation—as opposed to the more formal variants, such as committees and councils."

May I suggest that colleagues presently involved in planning new hospitals should insist that such facilities are provided. They should also ensure that offices for clinicians, where the work of the firm is co-ordinated, are retained, for this is another area which is at risk on "economic" grounds.

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Survival of the fittest?

SIR,—I read with interest Mr Hugh G Sturzaker's paper "Survival of the fittest" (11 August, p 374), having recently completed the obstacle course myself. I agree with his comments but would like to add two points.

Firstly, the choosing of a consultant post must be similar to a game of Russian roulette. Advertisements appear at infrequent intervals for posts which become available in the very near future. This means that senior registrars must often make a quick and hasty decision regarding their future. Surely a more sensible scheme would enable the prospective consultant to have knowledge of posts becoming available over a period of six to 12 months, so that he can wisely decide about his future.

Secondly, a number of consultant posts are given to local candidates, which makes a mockery of the interview procedure. It is therefore wise that registrars should choose their senior registrar posts very carefully. It is to be hoped that, with the introduction of a structural training programme for registrars, the transition to consultant will be less hazardous for doctors and their families.

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Points

Unfit for holiday

Mr WILLIAM I MARTIN (Greenock, Renfrewshire) writes: (28 July, p 273) "All three told me that they had been specifically told by their doctors that they were fit to go on holiday," says Dr A J E Pollock (28 July, p 273). Surely one of the early things one learns on acquiring one's MB is to treat with cynicism any such statement regarding what another doctor "said"—especially if things have gone wrong.

Fifty years of penicillin

Dr HENRY S FRASER and Mrs IRIS BANNOCHIE (formerly Bayley) write: Among the bright young men invited by Florey to Oxford in 1939 was Dr Harry Bayley, a Barbadian graduate of Cambridge and King's College